

It is claimed:

1           1. A method of treating molten steel under vacuum  
2 which comprises the steps of:

3           a) applying a degassing vacuum to molten steel; and

4           b) feeding pieces of a degasification-promoting solid  
5 into the molten steel with a size of 2 to 50 mm at least in a  
6 starting phase of the degasification.

1           2. The method defined in claim 1 wherein the  
2 degasification solid is fed to the molten steel in the first 5  
3 minutes of the degasification thereof.

1           3. The method defined in claim 2 wherein the  
2 degasification solid is fed continuously at a feed rate of 20 to  
3 100 kg/min while the molten steel is under a pressure < 2 mbar.

1           4. The method defined in claim 3 wherein the pieces of  
2 the degasification-promoting solid are porous.

1           5. The method defined in claim 4 wherein the  
2 degasification solid is a granulate.

1           6. The method defined in claim 4 wherein the  
2 degasification solid is metal, ore or slag or a combination  
3 thereof.

1           7. The method defined in claim 6 wherein the ore is  
2 iron ore.

1           8. The method defined in claim 4 wherein the  
2 degasification solid is stored in a vacuum bunker and is metered  
3 into the molten steel.

1           9. The method defined in claim 8 wherein the  
2 degasification solid is metered into the molten steel by a  
3 vibrating trough or a cell wheel gate.

1           10. The method defined in claim 4 wherein, for a  
2 circulating steel melt the solid is blown into the melt by  
3 nozzles opening below the surface of the melt.

1           11. The method defined in claim 4 wherein, for a  
2 circulating melt or a lad stand degasification, the solid is  
3 blown into the melt by lances extending into the melt.